



Complete Summary

TITLE

Acute myocardial infarction (AMI): percentage of members 18 years of age and older during the measurement year who were hospitalized and discharged alive from July 1 of the year prior to the measurement year to June 30 of the measurement year with a diagnosis of AMI and who received persistent beta-blocker treatment for six months after discharge.

SOURCE(S)

National Committee for Quality Assurance (NCQA). HEDIS® 2010: Healthcare Effectiveness Data & Information Set. Vol. 2, Technical Specifications. Washington (DC): National Committee for Quality Assurance (NCQA); 2009 Jul. 417 p.

Measure Domain

PRIMARY MEASURE DOMAIN

Process

The validity of measures depends on how they are built. By examining the key building blocks of a measure, you can assess its validity for your purpose. For more information, visit the [Measure Validity](#) page.

SECONDARY MEASURE DOMAIN

Does not apply to this measure

Brief Abstract

DESCRIPTION

This measure is used to assess the percentage of adult members 18 years of age and older during the measurement year who were hospitalized and discharged alive from July 1 of the year prior to the measurement year to June 30 of the measurement year with a diagnosis of acute myocardial infarction (AMI) and who received persistent beta-blocker treatment for six months after discharge.

RATIONALE

Over eight million American adults have a history of myocardial infarctions, or heart attacks. Approximately 920,000 new and recurrent heart attacks occur in the United States each year, resulting in 450,000 deaths. One half of those who

die do so within one hour of symptom onset.Â The American Heart Association and the American College of Cardiology strongly recommend treatment using beta-blockers following a heart attack to reduce mortality during acute and long-term management of heart attacks.

PRIMARY CLINICAL COMPONENT

Acute myocardial infarction (AMI); beta-blockers

DENOMINATOR DESCRIPTION

Members age 18 years and older as of December 31 of the measurement year who were discharged alive from an acute inpatient setting with an acute myocardial infarction (AMI) from July 1 of the year prior to the measurement year through June 30 of the measurement year (see the "Description of Case Finding" and the "Denominator Inclusions/Exclusions" fields in the Complete Summary)

NUMERATOR DESCRIPTION

A 180-day course of treatment with beta-blockers

Identify all members in the denominator population whose dispensed days supply is greater than or equal to 135 days in the 180 days following discharge. Persistence of treatment for this measure is defined as at least 75 percent of the days supply filled.

Refer to the original measure documentation for additional details.

Evidence Supporting the Measure

EVIDENCE SUPPORTING THE CRITERION OF QUALITY

- A clinical practice guideline or other peer-reviewed synthesis of the clinical evidence
- A formal consensus procedure involving experts in relevant clinical, methodological, and organizational sciences
- One or more research studies published in a National Library of Medicine (NLM) indexed, peer-reviewed journal

Evidence Supporting Need for the Measure

NEED FOR THE MEASURE

Use of this measure to improve performance
Variation in quality for the performance measured

EVIDENCE SUPPORTING NEED FOR THE MEASURE

National Committee for Quality Assurance (NCQA). The state of health care quality 2009. Washington (DC): National Committee for Quality Assurance (NCQA); 2009. 127 p.

State of Use of the Measure

STATE OF USE

Current routine use

CURRENT USE

Accreditation
Decision-making by businesses about health-plan purchasing
Decision-making by consumers about health plan/provider choice
External oversight/Medicaid
External oversight/Medicare
External oversight/State government program
Internal quality improvement

Application of Measure in its Current Use

CARE SETTING

Managed Care Plans

PROFESSIONALS RESPONSIBLE FOR HEALTH CARE

Measure is not provider specific

LOWEST LEVEL OF HEALTH CARE DELIVERY ADDRESSED

Single Health Care Delivery Organizations

TARGET POPULATION AGE

Age 18 years and older

TARGET POPULATION GENDER

Either male or female

STRATIFICATION BY VULNERABLE POPULATIONS

Unspecified

Characteristics of the Primary Clinical Component

INCIDENCE/PREVALENCE

Despite high rates of prescriptions in the acute phase, adherence to beta-blocker therapy declines significantly within the first year after a heart attack.

See also the "Rationale" field.

EVIDENCE FOR INCIDENCE/PREVALENCE

Phillips KA, Shlipak MG, Coxson P, Heidenreich PA, Hunink MG, Goldman PA, Williams LW, Weinstein MC, Goldman L. Health and economic benefits of increased beta-blocker use following myocardial infarction. JAMA2000 Dec 6;284(21):2748-54. [PubMed](#)

ASSOCIATION WITH VULNERABLE POPULATIONS

Unspecified

BURDEN OF ILLNESS

Cardiovascular diseases are the single largest killer of Americans. This disease takes nearly two lives every minute.

See also the "Rationale" field.

EVIDENCE FOR BURDEN OF ILLNESS

American Heart Association. Heart disease and stroke statistics - 2008 update. Dallas (TX): American Heart Association; 2008. 43 p.

UTILIZATION

About half of all heart attack survivors are readmitted to the hospital within one year of the event, and reoccurring heart attack rates remain exceedingly high.

EVIDENCE FOR UTILIZATION

Tavazzi L. Clinical epidemiology of acute myocardial infarction. Am Heart J1999 Aug;138(2 Pt 2):S48-54. [46 references] [PubMed](#)

COSTS

If all first-time heart attack survivors used a beta-blocker for 20 years, there would be an estimated 62,000 heart attacks prevented, 72,000 deaths from coronary heart disease avoided, 447,000 life-years gained and \$18 million saved.

EVIDENCE FOR COSTS

Phillips KA, Shlipak MG, Coxson P, Heidenreich PA, Hunink MG, Goldman PA, Williams LW, Weinstein MC, Goldman L. Health and economic benefits of increased beta-blocker use following myocardial infarction. JAMA2000 Dec 6;284(21):2748-54. [PubMed](#)

Institute of Medicine National Healthcare Quality Report Categories

IOM CARE NEED

Living with Illness

IOM DOMAIN

Effectiveness

Data Collection for the Measure

CASE FINDING

Users of care only

DESCRIPTION OF CASE FINDING

Members age 18 years and older as of December 31 of the measurement year who were continuously enrolled on the discharge date* through 180 days after discharge and who have had no more than one gap in enrollment of up to 45 days (commercial, Medicare) within the 180 days of the event or not more than a one-month gap in coverage (Medicaid)

*Event/diagnosis - Discharged alive from an acute inpatient setting with an acute myocardial infarction (AMI) from July 1 of the year prior to the measurement year through June 30 of the measurement year (see the "Denominator Inclusions/Exclusions" field).

DENOMINATOR SAMPLING FRAME

Patients associated with provider

DENOMINATOR INCLUSIONS/EXCLUSIONS

Inclusions

Members age 18 years and older as of December 31 of the measurement year who were discharged alive from an acute inpatient setting with an acute myocardial infarction (AMI) from July 1 of the year prior to the measurement year through June 30 of the measurement year. If a member has more than one episode of AMI from July 1 of the year prior to the measurement year through June 30 of the measurement year, the organization should only include the first discharge. Refer to Table PBH-A in the original measure documentation for codes to identify AMIs.

Transfers to acute facilities. Include hospitalizations in which the member was transferred directly to another *acute care facility* for any diagnosis. Count the discharge from the subsequent acute inpatient facility, not the initial discharge. The discharge date from the facility to which the member was transferred must occur on or before June 30 of the measurement year.

Readmissions. If the member was readmitted to an *acute or non-acute care facility* for any diagnosis, the organization should include the member in the denominator and use the discharge date from the original hospitalization.

Exclusions

- Use administrative data to look as far back as possible in the member's history through the end of the continuous enrollment period for evidence of a contraindication to beta-blocker therapy. Refer to Table PBH-C and Table PBH-D in the original measure documentation for codes and medications representing contraindications to beta-blocker therapy.
- *Transfers to non-acute facilities.* Exclude from the denominator hospitalizations in which the member was transferred directly to a *non-acute care facility* for any diagnosis.

RELATIONSHIP OF DENOMINATOR TO NUMERATOR

All cases in the denominator are equally eligible to appear in the numerator

DENOMINATOR (INDEX) EVENT

Clinical Condition
Institutionalization

DENOMINATOR TIME WINDOW

Time window brackets index event

NUMERATOR INCLUSIONS/EXCLUSIONS

Inclusions

A 180-day course of treatment with beta-blockers

Identify all members in the denominator population whose dispensed days supply is greater than or equal to 135 days in the 180 days following discharge.

Persistence of treatment for this measure is defined as at least 75 percent of the days supply filled.

Refer to the original measure documentation for additional details.

Exclusions

Unspecified

MEASURE RESULTS UNDER CONTROL OF HEALTH CARE PROFESSIONALS, ORGANIZATIONS AND/OR POLICYMAKERS

The measure results are somewhat or substantially under the control of the health care professionals, organizations and/or policymakers to whom the measure applies.

NUMERATOR TIME WINDOW

Fixed time period

DATA SOURCE

Administrative data

LEVEL OF DETERMINATION OF QUALITY

Individual Case

PRE-EXISTING INSTRUMENT USED

Unspecified

Computation of the Measure**SCORING**

Rate

INTERPRETATION OF SCORE

Better quality is associated with a higher score

ALLOWANCE FOR PATIENT FACTORS

Analysis by subgroup (stratification on patient factors, geographic factors, etc.)

DESCRIPTION OF ALLOWANCE FOR PATIENT FACTORS

This measure requires that separate rates be reported for Medicaid, Medicare, and commercial product lines.

STANDARD OF COMPARISON

External comparison at a point in time
External comparison of time trends
Internal time comparison

Evaluation of Measure Properties**EXTENT OF MEASURE TESTING**

Unspecified

Identifying Information

ORIGINAL TITLE

Persistence of beta-blocker treatment after a heart attack (PBH).

MEASURE COLLECTION

[HEDIS® 2010: Health Plan Employer Data and Information Set](#)

MEASURE SET NAME

[Effectiveness of Care](#)

MEASURE SUBSET NAME

[Cardiovascular Conditions](#)

DEVELOPER

National Committee for Quality Assurance

FUNDING SOURCE(S)

Unspecified

COMPOSITION OF THE GROUP THAT DEVELOPED THE MEASURE

National Committee for Quality Assurance's (NCQA's) Measurement Advisory Panels (MAPs) are composed of clinical and research experts with an understanding of quality performance measurement in the particular clinical content areas.

FINANCIAL DISCLOSURES/OTHER POTENTIAL CONFLICTS OF INTEREST

In order to fulfill National Committee for Quality Assurance's (NCQA's) mission and vision of improving health care quality through measurement, transparency and accountability, all participants in NCQA's expert panels are required to disclose potential conflicts of interest prior to their participation. The goal of this Conflict Policy is to ensure that decisions which impact development of NCQA's products and services are made as objectively as possible, without improper bias or influence.

ENDORSER

National Quality Forum

INCLUDED IN

Ambulatory Care Quality Alliance

ADAPTATION

Measure was not adapted from another source.

RELEASE DATE

2004 Jan

REVISION DATE

2009 Jul

MEASURE STATUS

This is the current release of the measure.

This measure updates a previous version: National Committee for Quality Assurance (NCQA). HEDIS® 2009: Healthcare Effectiveness Data & Information Set. Vol. 2, Technical Specifications. Washington (DC): National Committee for Quality Assurance (NCQA); 2008 Jul. various p.

SOURCE(S)

National Committee for Quality Assurance (NCQA). HEDIS® 2010: Healthcare Effectiveness Data & Information Set. Vol. 2, Technical Specifications. Washington (DC): National Committee for Quality Assurance (NCQA); 2009 Jul. 417 p.

MEASURE AVAILABILITY

The individual measure, "Persistence of Beta-blocker Treatment After a Heart Attack (PBH)," is published in "HEDIS® 2010. Healthcare Effectiveness Data & Information Set. Vol. 2, Technical Specifications."

For more information, contact the National Committee for Quality Assurance (NCQA) at 1100 13th Street, NW, Suite 1000, Washington, DC 20005; Telephone: 202-955-3500; Fax: 202-955-3599; Web site: www.ncqa.org.

COMPANION DOCUMENTS

The following is available:

- National Committee for Quality Assurance (NCQA). The state of health care quality 2009. Washington (DC): National Committee for Quality Assurance (NCQA); 2009. 127 p.

For more information, contact the National Committee for Quality Assurance (NCQA) at 1100 13th Street, NW, Suite 1000, Washington, DC 20005; Telephone: 202-955-3500; Fax: 202-955-3599; Web site: www.ncqa.org.

NQMC STATUS

This NQMC summary was completed by ECRI on June 16, 2006. The information was not verified by the measure developer. This NQMC summary was updated by ECRI Institute on February 19, 2008. The information was verified by the measure developer on April 24, 2008. This NQMC summary was updated by ECRI Institute on March 10, 2009. The information was verified by the measure developer on May 29, 2009. This NQMC summary was updated again by ECRI Institute on January 22, 2010.

COPYRIGHT STATEMENT

This NQMC summary is based on the original measure, which is subject to the measure developer's copyright restrictions.

For detailed specifications regarding the National Committee on Quality Assurance (NCQA) measures, refer to *HEDIS Volume 2: Technical Specifications*, available from the NCQA Web site at www.ncqa.org.

Disclaimer

NQMC DISCLAIMER

The National Quality Measures Clearinghouse™ (NQMC) does not develop, produce, approve, or endorse the measures represented on this site.

All measures summarized by NQMC and hosted on our site are produced under the auspices of medical specialty societies, relevant professional associations, public and private organizations, other government agencies, health care organizations or plans, individuals, and similar entities.

Measures represented on the NQMC Web site are submitted by measure developers, and are screened solely to determine that they meet the NQMC Inclusion Criteria which may be found at <http://www.qualitymeasures.ahrq.gov/about/inclusion.aspx>.

NQMC, AHRQ, and its contractor ECRI Institute make no warranties concerning the content or its reliability and/or validity of the quality measures and related materials represented on this site. The inclusion or hosting of measures in NQMC may not be used for advertising or commercial endorsement purposes.

Readers with questions regarding measure content are directed to contact the measure developer.

[Copyright/Permission Requests](#)

Date Modified: 5/24/2010

